A Literature Review on Alcohol and Substance Use in people with Learning Disabilities

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Content

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- Background
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- Alcohol + Substance use
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Learning disability (LD) is defined by three core criteria: 1

- Significant impairment of intellectual functioning;
- Significant impairment of adaptive/social functioning;
- Age of onset before adulthood.
Background

- Up to 2% of the population
- Over 1 million people in England\textsuperscript{2}

- Exists on a gradient – from mild to profound

- Around 80% of people with mild LD are not diagnosed or known to statutory services\textsuperscript{3}
## Background – type of LD

<table>
<thead>
<tr>
<th>Type of LD</th>
<th>IQ</th>
<th>% of those with LD</th>
<th>Presentation</th>
</tr>
</thead>
</table>
| Mild      | 50–69 | 80                 | • Conversational language – can read / write  
• Can live independently / work |
| Moderate  | 35–49 | 12                 | • Variable language – limited reading / writing  
• Likely to need support in ADLs / accommodation |
| Severe    | 20–34 | 7                  | • No / minimal language  
• Assistance for basic tasks and self care  
• Highly supported accommodation |
| Profound  | <20   | 1                  | • Full time support for all needs  
• High rates of co-morbidity |
Background – Causes of LD

- Caused by any factor that affects brain development
- Often the cause is unknown
# Background – Causes of LD

<table>
<thead>
<tr>
<th>Cause</th>
<th>Examples</th>
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</thead>
<tbody>
<tr>
<td>Genetic</td>
<td>Chromosomal disorders, syndromes – Down syndrome, Fragile X, Turner’s</td>
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<tr>
<td></td>
<td>Metabolic</td>
</tr>
<tr>
<td></td>
<td>Structural abnormalities – hydrocephalus, microcephaly</td>
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<tr>
<td>Antenatal</td>
<td>Teratogens – alcohol, drugs</td>
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<td></td>
<td>Maternal infection –TORCH infections</td>
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<td></td>
<td>Maternal hypothyroidism</td>
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<tr>
<td>Perinatal</td>
<td>Extreme prematurity – intraventricular haemorrhage, periventricular</td>
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<tr>
<td></td>
<td>leucomalacia</td>
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<tr>
<td></td>
<td>Hypoxic-ischaemic injury – birth asphyxia</td>
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<tr>
<td></td>
<td>Metabolic – neonatal hypoglycaemia, hyperbilirubinaemia</td>
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<tr>
<td>Postnatal</td>
<td>Traumatic brain injury</td>
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<tr>
<td></td>
<td>Anoxia – suffocation, near drowning</td>
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<tr>
<td></td>
<td>Infection – meningitis, encephalitis</td>
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</tbody>
</table>
Background – risks

- Greater risk of physical health disorders
- 4x more mental health problems
  Point prevalence = 40%\(^4\)
- Worse access to healthcare\(^5\)
- People with learning disabilities say they don’t receive advice on health promotion\(^6\)
Changing patterns of care for people with LD

From long-stay institutions to community care

Exposed to social and environmental pressures

Adopt behaviours that impact negatively on their health

More access to alcohol / illicit substances/ sexual relationships
Discrepancies in the literature

Studies suggest:
- lower\textsuperscript{7,8,9,10,11,12,13,14}
- similar\textsuperscript{15,16,17}
- higher\textsuperscript{18,19,20}

Risk of substance use than general population

Most studies find lower rates of alcohol use than general population\textsuperscript{21,22}

Of those that do use – higher risk of substance abuse\textsuperscript{15,17,22}

Appears to be a hidden problem within the LD population
Prevalence of substance misuse 0.5–2.6 % (up to 26%)\textsuperscript{23,34}

- Alcohol main substance to be misused\textsuperscript{25,26}
- Followed by cannabis and cocaine \textsuperscript{26}

<table>
<thead>
<tr>
<th>Past month prevalence\textsuperscript{22}</th>
<th>%</th>
<th>Vs general population</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alcohol</td>
<td>35.5–47</td>
<td>Lower (similar)</td>
</tr>
<tr>
<td>Smoking</td>
<td>20.5</td>
<td>Same</td>
</tr>
<tr>
<td>Marijuana</td>
<td>13</td>
<td>Lower</td>
</tr>
<tr>
<td>Cocaine</td>
<td>1.5</td>
<td>Lower</td>
</tr>
</tbody>
</table>
Prevalence

- 1/5th of alcohol users also use illicit drugs/prescribed medication\(^2^5\)
- Older adults more likely to use alcohol exclusively\(^2^2\)
- Younger more likely to use alcohol + cannabis or stimulants\(^2^2\)
- ~5% of youths in drug and alcohol service have a degree of LD\(^2^1\)
- If LD + mental disorder – substance abuse range of 7–20%\(^2^3,2^7\)
Reasons to use

1. Being like others – to ‘fit in’
2. Social and emotional influences
3. Learning from experience
4. Choices and challenges
5. Self medicating against negative experience
6. To relieve stress
7. To develop relationships

- Similar to general population$^{24,28,29,30}$
## Risk factors

<table>
<thead>
<tr>
<th>Risk factors $^7,16,21,22,25,26,31$</th>
<th></th>
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<tbody>
<tr>
<td>• Male</td>
<td>• Use of substances by friends</td>
</tr>
<tr>
<td>• Mild LD population</td>
<td>• Poor understanding of disability</td>
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<tr>
<td>• Young</td>
<td>• Hyperactivity</td>
</tr>
<tr>
<td>• Those that don’t use LD services</td>
<td>• Lack of assertiveness</td>
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<tr>
<td>• Living independently</td>
<td>• Low self esteem</td>
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<tr>
<td>• Forensic history</td>
<td>• Susceptibility to peer pressure</td>
</tr>
<tr>
<td>• Mental health problem</td>
<td>• Desire for social acceptance</td>
</tr>
<tr>
<td>• Stressful life events</td>
<td>• Social isolation</td>
</tr>
<tr>
<td>• Non–urban area</td>
<td>• Lack of example setting in childhood</td>
</tr>
<tr>
<td>• Non – Caucasian</td>
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</tbody>
</table>

Supportive family are a strong protective factor$^8$
Characteristics

Compared to the non-LD population:

- Later onset of use\(^{22,27,29}\)
- Greater risk of peer influence\(^{16}\)
- Less caucasian\(^{23}\)
- ‘All or nothing’ principle\(^{12}\)
- Less likely to receive treatment or remain in treatment\(^{22}\)
## Risks for the user

<table>
<thead>
<tr>
<th>Risks for the user$^{13,17,22,23,25,29,}$</th>
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</thead>
<tbody>
<tr>
<td>Medication interactions</td>
</tr>
<tr>
<td>Less likely to seek help</td>
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<tr>
<td>High risk of complications:</td>
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<tr>
<td>- ↑cognitive deficits</td>
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<tr>
<td>- Cardiovascular, respiratory and GI problems</td>
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<tr>
<td>- ↑ epileptic activity</td>
</tr>
<tr>
<td>- ↑ motor deficit</td>
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<tr>
<td>Aggression, erratic mood changes</td>
</tr>
<tr>
<td>Sexual exploitation</td>
</tr>
<tr>
<td>Difficulties maintaining relationships</td>
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<tr>
<td>Loss of daily routine</td>
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</table>
Interventions suitable for non-LD population are not suitable for LD

- Need to adapt interventions
- Reasonable adjustments must be made
- Need early identification
- Need to start at young age

In one study 6% tried cigarettes and 15% drank alcohol at the age of 10 years or younger $^{32}$
Interventions

- People with LD and substance misuse report that their main source of support is from LD services – in educational and liaison roles

- Perceive main stream addiction services as negative

- Need better access to a wide range of specialist services
Interventions

Interventions include: 13, 21, 24, 27, 29, 30, 32, 33

1. Behavioural modification
   Self-determination theory
   Motivational interviewing
   Cognitive behavioural therapy
   Psychomotor therapy

2. Alcohol education

3. Modification of existing treatment
   E.g. AA concept of powerlessness over substances

4. Further healthcare professional training

5. Liaison between alcohol services and services for people with LD
Modification of existing treatment

- Longer treatment
- Short sessions
- More supportive
- Repetition
- Close work with family members
- Patience
- Flexibility
- Simplification of topics
- Teaching approach
- Less confrontation
- Increased individual work + Less group work
- Concrete goals over short time frames
- Use of pictures / quizzes / games
- Incentives
- Role playing
- Maintenance sessions
Interventions

So far interventions have varying success:\textsuperscript{24,32}

- Increased knowledge and skills
- Not improved attitudes
- Some reduction in substance use

LD mentioned in NICE Alcohol guidelines:\textsuperscript{34}

- Assisted inpatient withdrawal recommended
- No further guidance given
- Clearly additional guidance needed
Conclusion

Little evidence to guide practice:

- Most studies epidemiological and inconclusive\(^{21}\)
- Unreliable rates of substance use in LD population\(^{22}\)
- Effective and evidence based prevention programs lacking
- Studies are small, run in specialist single centre settings and are uncontrolled\(^{24}\)

- Some RCT’s in progress\(^{17,24}\)
Further research

More robust research needed$^{22,33}$
- To gauge magnitude of problem
- To elucidate substance use patterns + consequences
- To clarify pathways to substance abuse care
- To test effectiveness of interventions
- Prevention studies
- To establish guidelines
References

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